### ETTERITATIONAL BEARCH REFORT

# CLASSIFICATION OF SUBJECT MATTER

## IPC7 H04L 12/24

According to International Patent Classification (IPC) or to both national classification and IPC

### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 H04L, H04Q, H04M, G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Patents and applications for Inventions since 1975

Korean Utility models and applications for Utility models since 1975

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used)

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|-----------|--|-----------------------|
| Α .       | WO 02/102098 A1 (TANTIVY COMM INC. ) 19 DEC 2002 see the whole documents           | 1 - 2                 |
| A         | WO 03/107698 A1(UTSTARCOM Inc) 24 DEC 2003 see the whole documents                 | 1 - 2                 |
| <b>A</b>  | US 2002-197654 A1 (Narayan P.) 26 DEC 2002 see the whole documents                 | 1-2                   |
| A         | KR 1999-56549 A1 (Sansung) 15 JUL 1999 see the whole documents                     | 1 - 2                 |
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|---|----------------------|--------------|------------|------------|------|--------|
| 1 | Further documents as | re listed in | the contir | iuation of | Box  | Ú.     |

See patent family annex.

- Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
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- "O" document referring to an oral disclosure, use, exhibition or other
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of mailing of the international search report

Date of the actual completion of the international search

25 FEBRUARY 2005 (25.02.2005)

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# BEST AVAILABLE CUPY

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No. PCT/KR2005/000139

| Patent document cited in search report | Publication<br>date                    | Patent family member(s)  | Publication<br>date      |
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| WO 02/102098 A1                        | US 6,151,3<br>US 6,388,9<br>US 6,452,9 | WO 01/58043 A3 32 A 21 NOV 200 99 B1 14 MAY 20 13 B1 17 SEP 200 81 B1 25 FEB 200                   | 0<br>02<br>2             |
| WO 03/107698 A1                        | 24 DEC 2003<br>US 2004-9               | 29979 T2 7 OCT 200<br>WO 03/77473 A1<br>95881 A1 20 MAY 2<br>8822 A 21 JAN 200<br>666 A1 08 DEC 20 | 18 SEP 2003<br>004<br>05 |
| US 2002-197654 A1                      |  | WO 99/35865 C2<br>33025 25 APR 200<br>53 15 JAN 2002   | 23 SEP 1999              |
| KR 1999-56549 A1                       | 15 JUL 1999                            | NONE   | ·                        |